

MILK RIVER WATERSHED NEWS

Lt. Governor Ohs Meets with Alberta Officials on New Dam Proposal

By Marv Cross, DNRC

Montana's Lieutenant Governor, Karl Ohs, and Alberta's Minister of the Environment, Lorne Taylor established a working team to determine whether a proposed dam on the Milk River in Alberta could have mutual benefits for both Alberta and Montana. Ohs and Taylor met in Milk River, Alberta on November 22nd along with a host of officials from their respective governments. The meeting was held at the request of a grass roots Alberta group known as the Milk River Basin Water Management Committee (Alberta Committee). Arrangements for the meeting were made by the Alberta Committee in cooperation with the Milk River International Alliance

(MRIA), a local watershed group based in Montana with membership from both Montana and Canada. The Alberta Committee hosted a wonderful lunch for the participants.

Alberta is interested in developing new irrigation and other water uses in the Milk River basin. Taylor opened the meeting by stating, "The purpose (of the meeting) is to start a formal process for performing a study." The goal of the study would be to examine potential benefits of a

Milk River storage project in Alberta for both Alberta and Montana. Through this process, Montana would be able to decide whether to participate in the project. According to Taylor, "Alberta has significant water issues in the basin and has committed funds to conduct a feasibility



Lt. Governor Ohs talks with Alberta water users about the Alberta storage project in Milk River, Alberta.

study that will look at both on and off-stream storage options." However, Taylor made it clear that for a dam to be constructed on the Milk River in Alberta, two things must happen. First, the project must be economically feasible and second, American cooperation is essential. Taylor added, "For anything (construction of a dam) to happen, we must have American dollars. If studies indicate that there is enough mutual benefits, perhaps we can move forward."

Lt. Governor Karl Ohs, noted, "I know the Milk River well as my



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Paradise Valley Receives Leadership Award in Water Conservation

By Mike Dailey, DNRC

Water conservation is a tough sell in the Milk River basin. Especially, when there is a lackluster economy, chronic water shortages, and an uncertain water supply. But the Paradise Valley Irrigation District doesn't see water conservation as a liability. It sees it as a future investment.

The District developed and then implemented a water conservation plan during the 1999 irrigation season and has never looked back. The District lacked data for making good decisions, so it established a water measurement program. They installed measuring devices and data recorders on major drains and canals. What a challenge! Standard measuring devices such as flumes and weirs would not work, as the Milk River gradient was too flat. They chose electronic meters that use acoustic Doppler technology. They also purchased a portable prop meter for the ditch rider to measure individual outlets. For the first time, water was being measured at the turn-

outs and allocated to individual water users based on actual water use. They saw immediate results. Overall water management began to improve and water was being distributed fairly.

Paradise Valley used these data to develop a water budget and to make better decisions. For example, the Hillside Ditch was known for its seepage and operational problems. But no one knew how bad the problems were.

As suspected, the water budget showed that the Hillside Ditch would be a significant challenge to correct. The district developed a radical conservation plan to reconfigure the Hillside Ditch with a new pump and pipeline to replace inefficient portions of the canal. To pay for these improvements, funds are being actively pursued from the DNRC Renewable Resource Grant program, the USBR Water Conservation and Field Services Program, the NRCS Environmental Quality Incentive Program commonly known as EQIP, and from the district water

user fund.

The Bureau of Reclamation recognizing the district's progressive leadership in water conservation presented it with the 2001 Commissioner's Water Conservation Award for the Great Plains Region. The Bureau gives this award to individuals and entities that have demonstrated significant accomplishments for improving water use efficiency. "We're committed to water conservation," stated Bim Strausser, president of Paradise Valley. "We've replaced 22 old turnouts with new standardized turnouts on a large lateral, and we plan on replacing an additional 70 turnouts over the next three years." The broad goals of Paradise Valley are to improve conveyance efficiency from the current 40 percent to 50 percent over the next 10 years, and then to 60 percent within 20 years, and to improve on-farm efficiencies from 23 percent to 50 percent over the next thirteen years.

The Paradise Valley Irrigation

District commits about \$8,700 of its own funds annually to water conservation. The district also employs a part-time coordinator to assist in defining and solving water problems.

When you see Commissioners Bim Strausser, Bruce Anderson, or Pat Molyneaux, congratulate them on their award and commitment to water conservation.



Paradise Valley Irrigation District Commissioners Bim Strausser and Bruce Anderson accept the 2001 Commissioner's Water Conservation Award for the Great Plains Region from Mark Limbaugh of External and Intergovernmental Affairs, Washington D.C., on behalf of John W. Keyes III, the US Bureau of Reclamation Commissioner. The ceremony was held at Canyon Ferry Dam on July 15, 2002.

family homesteaded near Malta in an area now served by irrigation from the Milk River.” He further stated, “Montana is willing to work with Alberta to find out if there are mutual benefits for both countries.”

According to Rich Moy, Water Management Bureau Chief for Montana’s Department of Natural Resources and Conservation, the idea of a dam on the Milk River in Alberta is not a new concept. In the mid-1980’s Moy served as Chairperson of a Montana delegation on a technical team that studied the feasibility of a similar project. However, a change in the political and economic climate in Alberta forced the 1980’s effort to be discontinued.

To date, Alberta has never used their full allocation of the natural flow of the Milk River in accordance with the 1909 Boundary Waters Treaty. In fact, a 1980 study completed by the Prairie Farm Rehabilitation Administration of Canada, identified that in over half of the 60 years of record, Alberta was entitled to an average of 34,000 acre-feet of water that passed into Montana.

The Alberta Committee would like to use this water. They are spearheading an effort to update the 1980’s studies. This group hopes to store Alberta’s share of the Milk when the water is available, allowing up to 15,000 acres of new irrigation to be developed and to stabilize municipal water supplies. According to Tom Gilcrest, Chairman of the Alberta Committee, the dam would provide a more reliable supply of

municipal water to local towns of Milk River and Coutts, Alberta and Sweetgrass, Montana.

Of course, Alberta’s unused share of the Milk has been stored in Fresno and Nelson reservoirs or directly diverted and used in Montana. The Alberta Committee knows that its Montana neighbors have historically used Alberta’s share of the Milk River and they do not want to inflict additional

during the summer of 2002. With the recent problems associated with the St. Mary Canal and the Montana’s heavy reliance on Alberta’s share of the Milk, the Alberta Committee hopes Montana’s water users are interested in participating in the study.

The preferred dam site, called the “Forks Site” is located three miles downstream from the confluence with North Milk River,

which would be about 12 miles west of the town of Milk River. In 1986, the Prairie Farm Rehabilitation Administration examined three sizes for the Forks Site dam and reservoir. The largest size, called the topographic limit, would be 147 ft. high and hold 250,000 acre-feet of water. The next size, referred to as the “High Level” dam, would be 140 feet high and hold about 200,000 acre-feet of water. The smallest of the three

sizes, called the “Intermediate II” alternative would be 127 feet high and hold about 134,000 acre-feet of water (nearly the same volume of water that Fresno Dam was originally designed to hold). The Alberta Committee has indicated that the Intermediate II size would meet Alberta’s needs.

There is little doubt that construction of any of the three alternatives would have drastic effects on Montana’s water supply. Any additional depletion will exacerbate existing shortages for the Milk River Project. However, Alberta feels the “High Level” alternative could meet Alberta’s needs, but also supply substantial



Alberta and Montana officials discuss the process for studying the new Milk River Storage Project.

pain on Montana water users. The Alberta Committee believes that by building a larger dam in Alberta, the additional storage capacity could be used by Montana to help compensate for losses to the Milk River Project. They also feel that a cooperative venture could help improve basin wide water management that would benefit both countries.

Besides more storage for Montana, the Alberta Committee sees other potential benefits for Montana: less sedimentation downstream into Fresno Reservoir, reduced flood damage in the basin, and the potential for back-up storage when the St. Mary Canal needs repair as occurred

new storage for Montana users. The Alberta Committee hopes that the additional storage provided in the "High Level" dam might actually improve Montana's supply enough to encourage the investment of American dollars to build the structure.

Moy remains hopeful. Results from the 1980's study indicated that Montana would need to take more water from the St. Mary River into the Milk River to make the project feasible. He also pointed out that presently Montana passes its surplus water into Alberta from the St. Mary River just as Alberta passes its surplus Milk River water to Montana. If Montana could transfer more of its St. Mary water into the new Alberta dam, the project could become more attractive. However, the canal is presently limited both by age-induced deterioration and total capacity. If repairing and enlarging the St. Mary canal is feasible, then perhaps the Alberta dam may benefit Montana.

Presently, the Bureau of Reclamation is conducting the North Central Regional Feasibility Study that is identifying options for resolving regional water supply problems. One of the options being considered is repair and possible enlargement of the canal. The results of the study will be crucial to the Alberta Dam analysis. According to Brent Esplin, the Bureau of Reclamation Study Coordinator, the study is a part of the Rocky Boy's Reservation Indian Reserved Water Rights Settlement and Water Supply Enhancement Act of 1999. Esplin explained that Congress authorized "a regional feasibility study to evaluate water and related resources in North-Central Mon-

tana in order to determine the limitation of those resources and how those resources can best be managed and developed to serve the needs of the citizens of Montana." One of the requirements of the Act is that the study "be planned and conducted in consultation with all affected interests, including interests in Canada."

So far, Esplin's team, with the help of local and state personnel, has identified major water issues within the north central Montana region and prepared a list of potential alternatives to address these issues. One of the primary issues addressed is water supply (or perhaps the lack of water supply might be a better description). Structural alternatives addressed to date include, enlarging Fresno Dam, installing a pumping plant to transfer water from the Milk River into Nelson reservoir, and rehabilitating the St. Mary Canal to higher capacities. It is possible that storage in the proposed Alberta Dam could be incorporated into the updated hydrology model being used by the Bureau to evaluate the benefits and cost of the alternatives being considered. If the Bureau incorporates the proposed Alberta Dam into its hydrology model, the analysis would be accomplished in close cooperation with DNRC's hydrologists. A target date for completion of Esplin's study is some time during the summer of 2003. In the mean time, Alberta is forging ahead with contracts to update its feasibility studies.

Alberta plans on keeping Montana officials involved with the feasibility study. Alberta would also like to conduct informational meetings in Montana as

the feasibility study progresses.

Alan Pentney, Regional Approvals Manager of the Southern Region of Alberta Environment, explained that once the present Alberta Feasibility Study is completed and the project is determined to be feasible, a number of regulatory processes must be complied with before dam construction can begin. For example, international agreements would need to be established, funds authorized, and an environmental impact assessment prepared. A joint Canadian Federal/Provincial hearing will need to be held before Alberta's Natural Resources Conservation Board. Once those steps are completed, International Joint Commission approval will be sought before a number of local and federal approvals for construction and operation of the dam can be acquired.

Garry Bucharski, head of the Technical Support Section of Water Projects for Environmental Operations for Alberta, explained that once all the local and federal approvals are obtained and the project receives authority to proceed, site investigations and detailed design and cost estimates would be prepared. Final design and the Environmental Impact Assessment process should take from 5 to 7 years with actual construction taking two additional years to complete.

Even with all of these hurdles to overcome, the Alberta Committee remains hopeful that there will be enough benefits for both Alberta and Montana to support construction. ✓

Coordinator's Corner

By Jim Thompson

So, what's the Milk River International Alliance been up over the past few months? In October, we began a number of new projects.

Working with the Hill County Conservation District, we submitted a grant application to address bank erosion along the Milk River in Hill County. The goals of the project are two-fold: Design a streambank stabilization project for addressing loss of agricultural land and sediment loading in the Milk River; and to provide an opportunity for basin stakeholders to work together on a project that addresses resource issues.

We continue to work with the Blaine County Conservation District on its Water Quality Assessment Project. We are in the process of writing another 319 Grant proposal for the next phase of the work. We want to evaluate

all the information compiled in phase I. If the information does not paint a complete picture of water quality, we hope to identify where additional information is needed to establish our baseline.

Over the next three months, we want to start some educational and weed management projects. The beginning of the year should be busy, interesting, and hopefully beneficial to all.

I stopped by and had coffee with a friend and his wife that raise geese along the Milk. Sitting at the kitchen table, I could tell they were a little nervous about something.

On the second cup of coffee, my friend said, "you know, it may be another dry year and me and the wife are thinking about increasing the size of our goose pond, which will take some sort of permit."

"Does that have you upset?" I asked. "Oh! Heavens no, the Federal Agencies are helping us all they can. They said if they can afford it they may help with the costs."

"So what's got you upset?" I asked. "Well, Jim," he said. "Maybe you can help us figure out the load the geese put in the pond." I looked out his kitchen window and watched the geese waddling out on the driveway and said, "I do have a couple of ideas, but knowing the nature of geese, it can be frustrating, oops! There went another one." ✓



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Water Supply Looks Better Than Last Year

By R. Scott Guentbner, U.S. Bureau of Reclamation

Good news so far. Storage in Fresno and Nelson Reservoirs is much better than in past years. High runoff from the June 8-11, 2002 rainstorm helped fill Fresno and than above normal rainfall across the basin in July and August helped the whole basin. On January 23, 2003, reservoir storage was above average for both Fresno and Nelson Reservoirs (Note table below). Storage in these reservoirs has not been this good since 1999. As expected, storage in Lake Sherburne is below normal primarily because a large amount of water was transferred to Fresno Reservoir last fall. This should help avoid a delay in the start of the irrigation season even if below normal runoff occurs this spring.

The mountain snowpack in the St. Mary River Drainage is still only 65 percent of average, much like the rest of Montana east of the Continental Divide. The runoff forecast for January 1 indicates the runoff in the St. Mary River is expected to be about 67 percent of average, and the Milk River upstream of Fresno Reservoir is expected to be only 40 percent of average. These forecasts will be again updated on February 1, and the first of each month through May. More snow in the mountains is needed before water users can receive a normal supply this coming spring. Watch for the early March snow condition report, as it is the best indicator of the amount of water supply that water users can be expected for the upcoming irrigation season. ✓

Reservoir	Storage in acre-feet	Percent of Normal	Percent of Full
Lake Sherburne	12,800	59	29
Fresno Reservoir	50,800	139	54
Nelson Reservoir	40,900	106	68

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